

	Field	Acres	Buffer	Net Ac.	Latitude	Long.	FSN#	Tract	Field	Tax ID #	RPC#
Herbert Plymale	RO81-1	13.6	2.6	11.0	37.141	-79.565	4256	6941	1	235 A 5	23500300
	RO81-2	31.9	7.1	24.8	37.142	-79.562	4256	6941	1	235 A 5	23500300
	RO81-3	8.1	0.2	7.9	37.137	-79.560	4256	6941	1	235 A 5	23500300
	RO81-4	43.1	13.9	29.2	37.139	-79.557	4256	6941	1	235 A 5	23500300
	<b>TOTALS</b>	<b>96.7</b>		<b>72.9</b>							

**VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION  
FORM D: MUNICIPAL EFFLUENT AND BIOSOLIDS**

**PART D-VI: LAND APPLICATION AGREEMENT - BIOSOLIDS AND INDUSTRIAL RESIDUALS**

A. This land application agreement is made on 11/16/2015 between Herbert M. Plymale referred to here as "Landowner", and Bio-Nomic Services Inc., referred to here as the "Permittee". This agreement remains in effect until it is terminated in writing by either party or, with respect to those parcels that are retained by the Landowner in the event of a sale of one or more parcels, until ownership of all parcels changes. If ownership of individual parcels identified in this agreement changes, those parcels for which ownership has changed will no longer be authorized to receive biosolids or industrial residuals under this agreement.

**Landowner:**

The Landowner is the owner of record of the real property located in Bedford, Virginia, which includes the agricultural, silvicultural or reclamation sites identified below in Table 1 and identified on the tax map(s) attached as Exhibit A.

Table 1.: Parcels authorized to receive biosolids, water treatment residuals or other industrial sludges			
Tax Parcel ID	Tax Parcel ID	Tax Parcel ID	Tax Parcel ID
<u>235 A5</u>	<u>23500700</u>		

☐ Additional parcels containing Land Application Sites are identified on Supplement A (check if applicable)

Check one: ☒ The Landowner is the sole owner of the properties identified herein.  
☐ The Landowner is one of multiple owners of the properties identified herein.

In the event that the Landowner sells or transfers all or part of the property to which biosolids have been applied within 38 months of the latest date of biosolids application, the Landowner shall:

1. Notify the purchaser or transferee of the applicable public access and crop management restrictions no later than the date of the property transfer; and
2. Notify the Permittee of the sale within two weeks following property transfer.

The Landowner has no other agreements for land application on the fields identified herein. The Landowner will notify the Permittee immediately if conditions change such that the fields are no longer available to the Permittee for application or any part of this agreement becomes invalid or the information herein contained becomes incorrect.

The Landowner hereby grants permission to the Permittee to land apply residuals as specified below, on the agricultural sites identified above and in Exhibit A. The Landowner also grants permission for DEQ staff to conduct inspections on the land identified above, before, during or after land application of permitted residuals for the purpose of determining compliance with regulatory requirements applicable to such application.

<u>Class B biosolids</u>	<u>Water treatment residuals</u>	<u>Food processing waste</u>	<u>Other industrial sludges</u>
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

\* Herbert Marshall Plymale Herbert Marshall Plymale 3420 Ayers Rd  
Landowner - Printed Name, Title                      Signature                      Mailing Address

**Permittee:**

Bio-Nomic Services Inc., the Permittee, agrees to apply biosolids and/or industrial residuals on the Landowner's land in the manner authorized by the VPA Permit Regulation and in amounts not to exceed the rates identified in the nutrient management plan prepared for each land application field by a person certified in accordance with §10.1-104.2 of the Code of Virginia.

The Permittee agrees to notify the Landowner or the Landowner's designee of the proposed schedule for land application and specifically prior to any particular application to the Landowner's land. Notice shall include the source of residuals to be applied.

☐ I reviewed the document(s) assigning signatory authority to the person signing for landowner above. I will make a copy of this document(s) available to DEQ for review upon request. (Do not check this box if the landowner signs this agreement)

Vaughn Buck Stevenson Vaughn "Bud" Stevenson 516 Rountree Road, Charlotte, NC 28217  
Permittee - Authorized Representative                      Signature                      Mailing Address  
Printed Name

VIRGINIA POLLUTION ABATEMENT PERMIT APPLICATION: PART D-VI LAND APPLICATION AGREEMENT

Permittee: Bio-Nomic Services, Inc.

County or City: Bedford County

Landowner: Herbert M. Plymale

**Landowner Site Management Requirements:**

I, the Landowner, I have received a DEQ Biosolids Fact Sheet that includes information regarding regulations governing the land application of biosolids, the components of biosolids and proper handling and land application of biosolids.

I have also been expressly advised by the Permittee that the site management requirements and site access restrictions identified below must be complied with after biosolids have been applied on my property in order to protect public health, and that I am responsible for the implementation of these practices:

I agree to implement the following site management practices at each site under my ownership following the land application of biosolids at the site:

1. Notification Signs: I will not remove any signs posted by the Permittee for the purpose of identifying my field as a biosolids land application site, unless requested by the Permittee, until at least 30 days after land application at that site is completed.
2. Public Access
  - a. Public access to land with a high potential for public exposure shall be restricted for at least one year following any application of biosolids.
  - b. Public access to land with a low potential for public exposure shall be restricted for at least 30 days following any application of biosolids. No biosolids amended soil shall be excavated or removed from the site during this same period of time unless adequate provisions are made to prevent public exposure to soil, dusts or aerosols;
  - c. Turf grown on land where biosolids are applied shall not be harvested for one year after application of biosolids when the harvested turf is placed on either land with a high potential for public exposure or a lawn, unless otherwise specified by DEQ.
3. Crop Restrictions:
  - a. Food crops with harvested parts that touch the biosolids/soil mixture and are totally above the land surface shall not be harvested for 14 months after the application of biosolids.
  - b. Food crops with harvested parts below the surface of the land shall not be harvested for 20 months after the application of biosolids when the biosolids remain on the land surface for a time period of four (4) or more months prior to incorporation into the soil,
  - c. Food crops with harvested parts below the surface of the land shall not be harvested for 38 months when the biosolids remain on the land surface for a time period of less than four (4) months prior to incorporation.
  - d. Other food crops and fiber crops shall not be harvested for 30 days after the application of biosolids;
  - e. Feed crops shall not be harvested for 30 days after the application of biosolids (60 days if fed to lactating dairy animals).
4. Livestock Access Restrictions:

Following biosolids application to pasture or hayland sites:

  - a. Meat producing livestock shall not be grazed for 30 days,
  - b. Lactating dairy animals shall not be grazed for a minimum of 60 days.
  - c. Other animals shall be restricted from grazing for 30 days;
5. Supplemental commercial fertilizer or manure applications will be coordinated with the biosolids and industrial residuals applications such that the total crop needs for nutrients are not exceeded as identified in the nutrient management plan developed by a person certified in accordance with §10.1-104.2 of the Code of Virginia;
6. Tobacco, because it has been shown to accumulate cadmium, should not be grown on the Landowner's land for three years following the application of biosolids or industrial residuals which bear cadmium equal to or exceeding 0.45 pounds/acre (0.5 kilograms/hectare).

\* Herbert M. Plymale  
Landowner's Signature

10-16-15  
Date

[Search](#)[Results](#)[Details](#)[Map](#)[Contact](#) | [GIS Page](#) [Log On](#)[Printer-Friendly](#)[View In Map](#)**Tax Map #**

235 A 5

**Link**

235 A 5

**Parcel Number(RPC).**

23500300

**Address**[Link to Real Estate Lookup/Sketch](#)**Parcel Information****Valuation****Improvements****Ownership History****General Information****Owner:**

PLYMALE HERBERT M

**Legal Acreage:**

184.4300

**Additional Owner:****PCDesc:**

6 Agricultural/Undevl(100+ac)

**Owner Address:**3420 AYERS RD  
MONETA, VA 24121**Legal Description:**

ROCK CASTLE

**Document Number:**

020003819

**Land Use****Tax Year:**

1997  
1998  
1999  
2000  
2001  
2002  
2003  
2004  
2005  
2006  
2007  
2008  
2009  
2010  
2011  
2012  
2013  
2014  
2015  
2016

R081-1

R081-2

R081-3

R081-4

# Bedford, VA

## Legend

- Highway
- Blue Ridge Parkway
- US Primary
- Virginia Primary
- Roads
- Parcels - County
- Parcels - Town

R081-1  
R081-2  
R081-3  
R081-4



**Title: Plymale Herbert M 235 A 5 23500300**

**Date: 3/16/2016**

DISCLAIMER: This drawing is neither a legally recorded map nor a survey and is not intended to be used as such. The information displayed is a compilation of records, information, and data obtained from various sources, and Bedford County is not responsible for its accuracy or how current it may be.

Feet

0 500 1000 1500 2000  
1:18,056 / 1"=1,505 Feet

## **Herbert Plymale Farm**

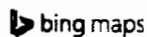
Bio-Nomic Services, Inc. is filing this application to apply approved (VA0025020) Class B biosolids to this designated farm land in Bedford County, Virginia.

The farm is located in the Radford community on the south side of Ayers Road. All fields are located in a predominately agricultural areas. All streams, drainage features, rock outcrops, structures, dwellings, property lines, roadways and wells are designated and buffered as required. There are no public contact sites in the vicinity of the farm. Biosolids are currently being used as crop nutrients on close by farms. This farm has been previously permitted by another biosolids contractor, however no applications have been performed.

Mr. Plymale operates his acreage as pasture. The grass cover in the pastures are predominately fescue.

The current fescue pastures are: RO 81-1, 81-2, 81-3 & 81-4.

Nutrient Management Plans will be written by a certified plan writer to address the application of biosolids to the designated fields that will address the most recent planned use of the fields should any changes occur in agricultural practices.



Ⓐ **Brownlee Ave SE, Roanoke, VA 24014**

Ⓑ **3420 Ayers Rd, Moneta, VA 24121**

**1 hr 05 min, 39.2 mi**

Light traffic (1 hr 1 min without traffic)

Via VA-24, VA-24 E

Herbert Plymale  
RO 81

Ⓐ **Brownlee Ave SE, Roanoke, VA 24014**

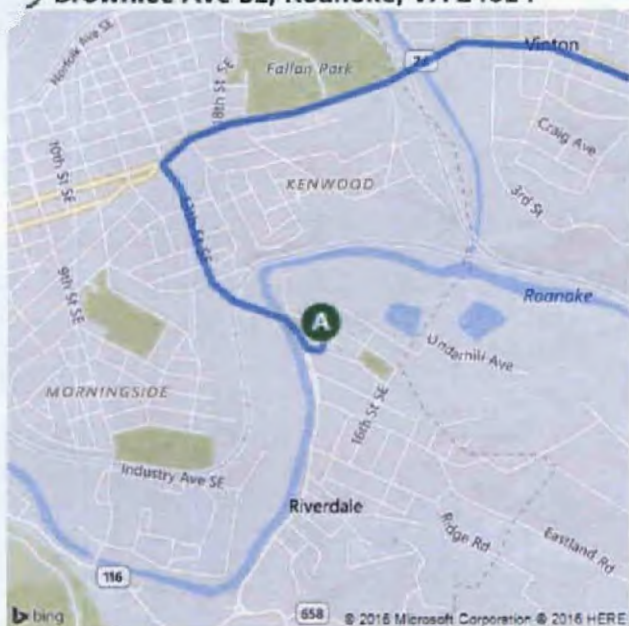
↑	1. Depart <b>Brownlee Ave SE</b> toward Kindred St SE	161 ft
↘	2. Turn <b>right</b> onto <b>Kindred St SE</b>	479 ft
↘	3. Turn <b>right</b> onto <b>Carlisle Ave SE</b> , and then immediately turn <b>right</b> onto <b>Bennington St SE</b>	0.8 mi
↘	4. Turn <b>right</b> onto <b>VA-24</b> Pass Hess in 1.0 mi	2.2 mi
↑	5. Keep <b>left</b> to stay on <b>VA-24 E / Bypass Rd</b>	0.4 mi
↘	6. Turn <b>right</b> to stay on <b>VA-24 E</b> Pass Exxon in 4.4 mi	19.1 mi, 26 min
↘	7. Turn <b>right</b> onto <b>VA-122 / Moneta Rd</b> Pass Marathon in 2.7 mi	4.9 mi
↙	8. Turn <b>left</b> onto <b>White House Rd</b>	6.0 mi
↙	9. Turn <b>left</b> onto <b>Smith Mountain Lake Pkwy</b>	3.2 mi
↙	10. Turn <b>left</b> onto <b>Stone Mountain Rd</b>	1.9 mi
↙	11. Bear <b>left</b> onto <b>Ayers Rd</b>	0.6 mi
	12. Arrive at <b>Ayers Rd</b> The last intersection is Stone Mountain Rd If you reach Foster Farm Ln, you've gone too far	

Ⓑ **3420 Ayers Rd, Moneta, VA 24121**

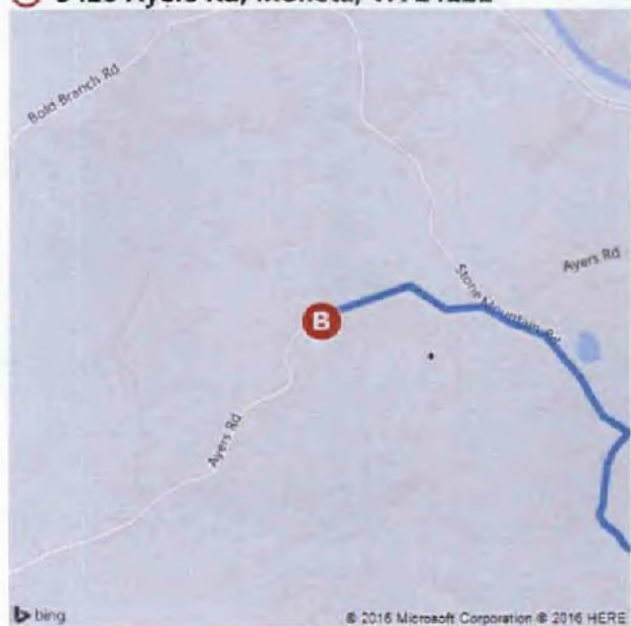




### 1) Brownlee Ave SE, Roanoke, VA 24014

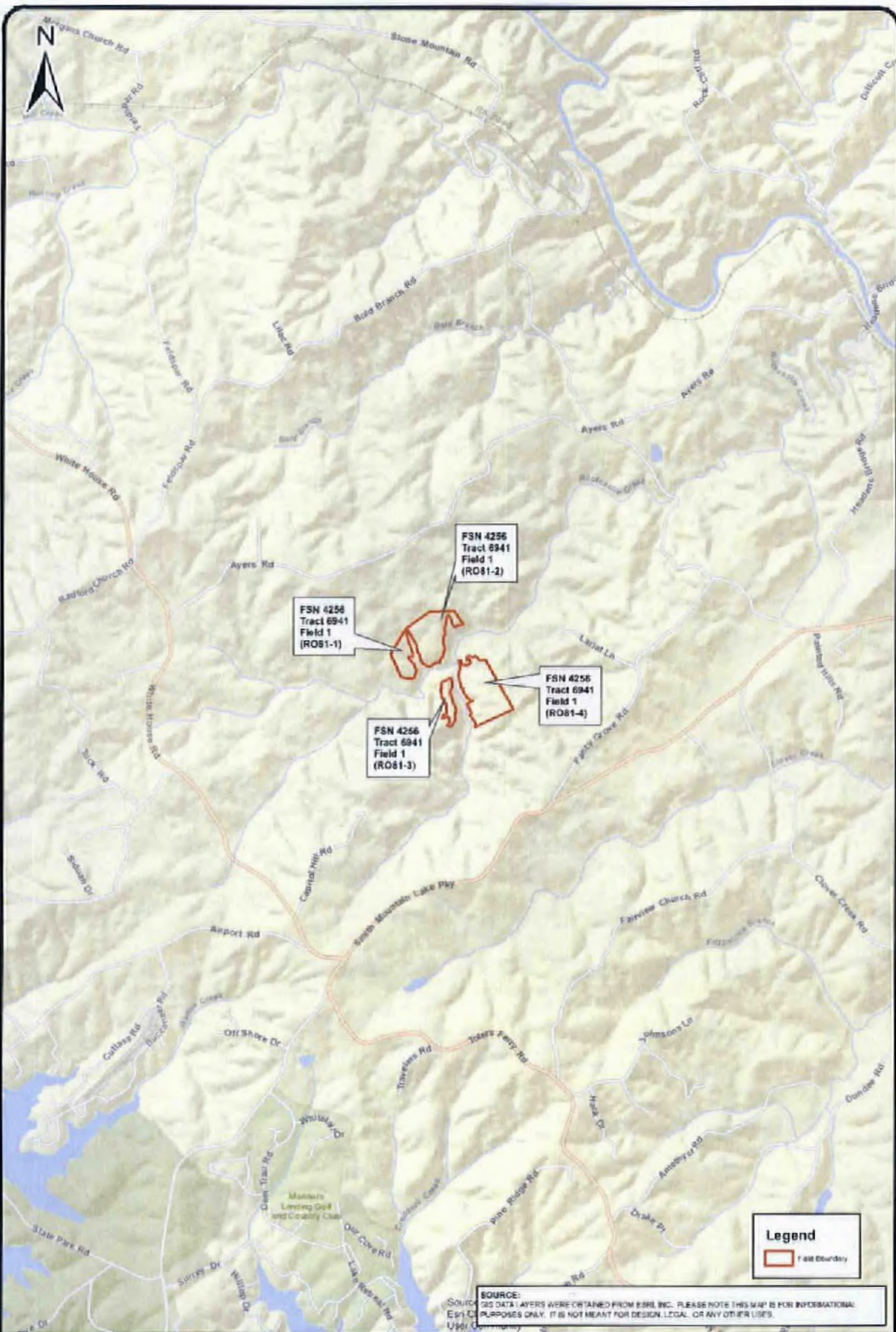


### 2) 3420 Ayers Rd, Moneta, VA 24121



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SCALE:	1" = 0.5 miles
DATE:	03-01-16
DRAWN BY:	MEM
PROJECT NO:	15-16 Ph. 01



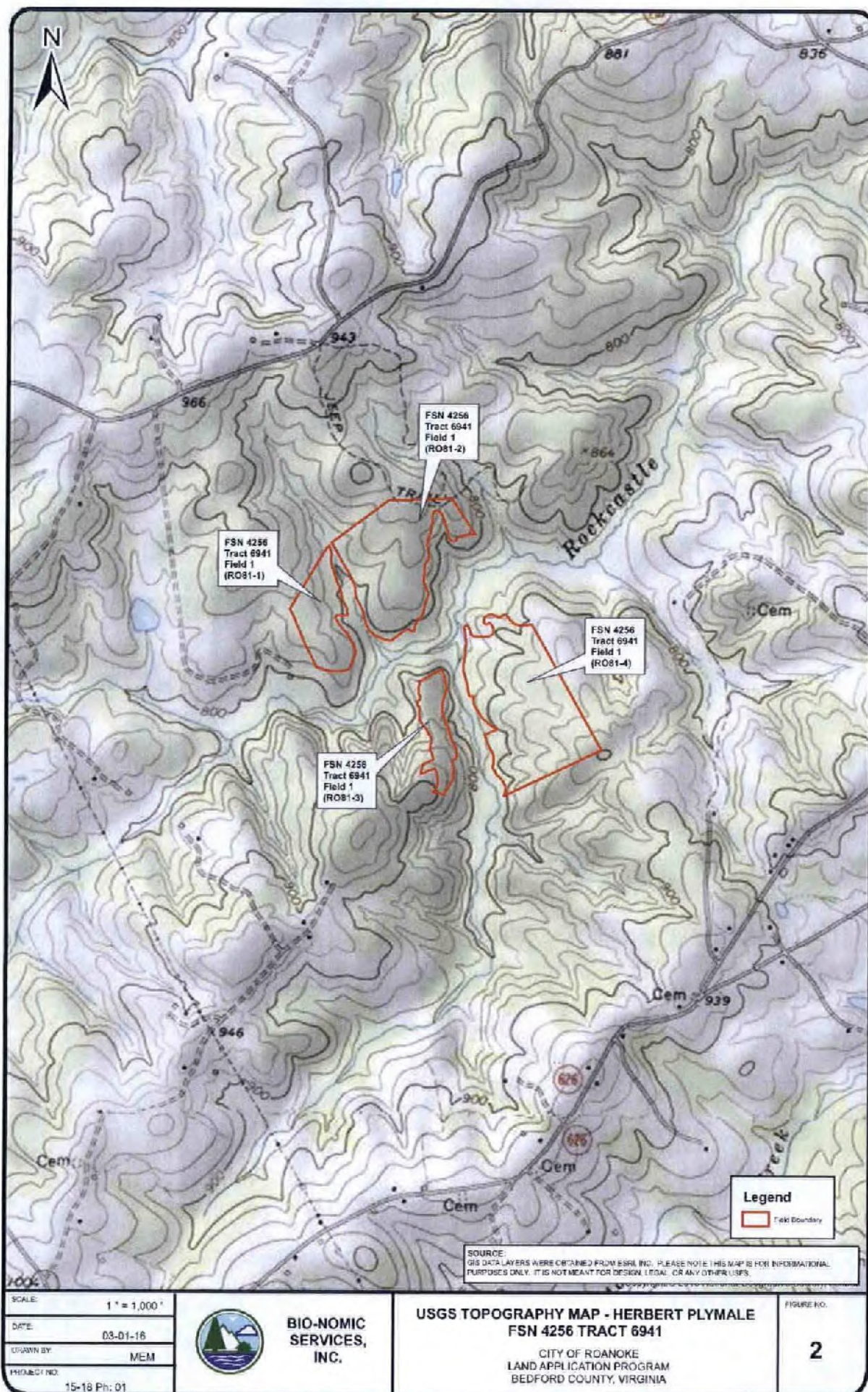
**BIO-NOMIC  
SERVICES,  
INC.**

**VICINITY MAP - HERBERT PLYMALE  
FSN 4256 TRACT 6941**  
CITY OF ROANOKE  
LAND APPLICATION PROGRAM  
BEDFORD COUNTY, VIRGINIA

FIGURE NO.  
**1**

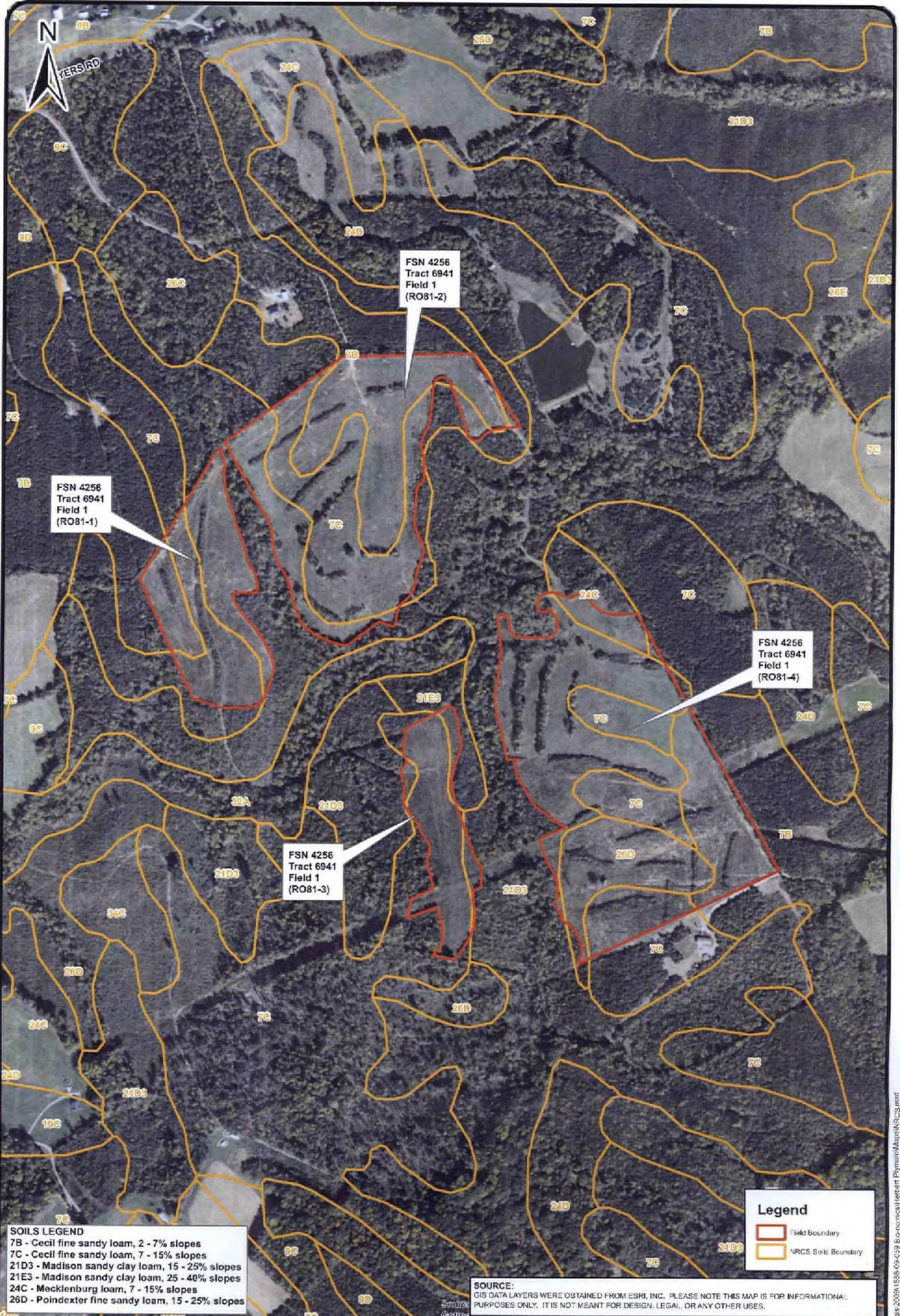
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1. The first step is to identify the problem or question that needs to be answered. This involves understanding the context and the specific requirements of the task.





**SOILS LEGEND**  
7B - Cecil fine sandy loam, 2 - 7% slopes  
7C - Cecil fine sandy loam, 7 - 15% slopes  
21D3 - Madison sandy clay loam, 15 - 25% slopes  
21E3 - Madison sandy clay loam, 25 - 40% slopes  
24C - Mecklenburg loam, 7 - 15% slopes  
26D - Poindexter fine sandy loam, 15 - 25% slopes

**Legend**  
Field Boundary  
NRCS Soils Boundary

**SOURCE:**  
GIS DATA LAYERS WERE OBTAINED FROM ESRI, INC. PLEASE NOTE THIS MAP IS FOR INFORMATIONAL PURPOSES ONLY. IT IS NOT MEANT FOR DESIGN, LEGAL, OR ANY OTHER USES.

SCALE: 1" = 500'  
DATE: 03-01-16  
DRAWN BY: MEM  
PROJECT NO: 15-18 Ph: 01



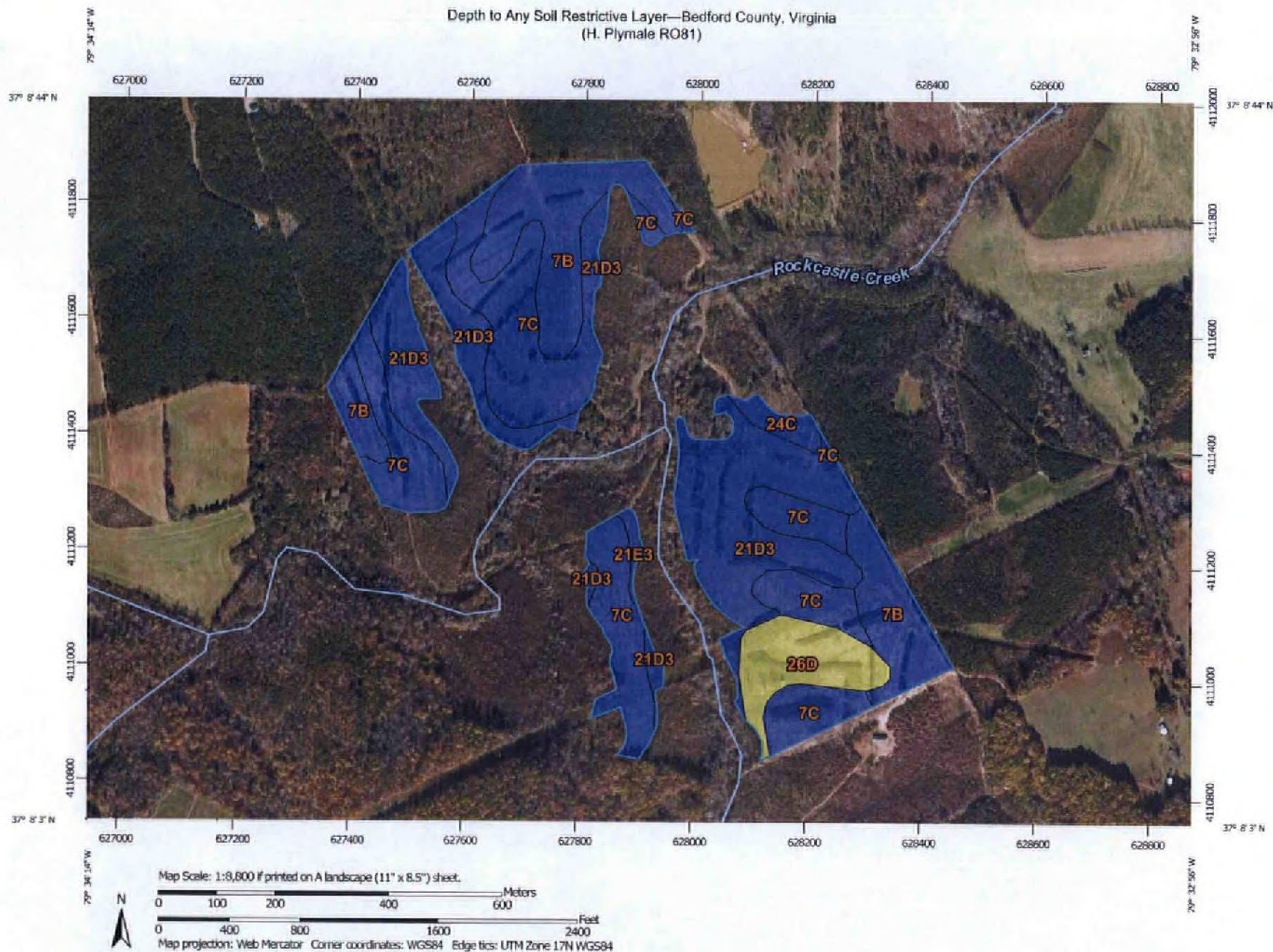
**BIO-NOMIC SERVICES, INC.**

**NRCS SOILS MAP - HERBERT PLYMALE**  
**FSN 4256 TRACT 6941**  
CITY OF ROANOKE  
LAND APPLICATION PROGRAM  
BEDFORD COUNTY, VIRGINIA

FIGURE NO.  
**3**



Depth to Any Soil Restrictive Layer—Bedford County, Virginia  
(H. Plymale RO81)






Depth to Any Soil Restrictive Layer—Bedford County, Virginia  
(H. Plymale RO81)

## MAP LEGEND

### Area of Interest (AOI)

 Area of Interest (AOI)

### Soils

#### Soil Rating Polygons


 0 - 25  
 25 - 50  
 50 - 100  
 100 - 150  
 150 - 200  
 > 200  
 Not rated or not available

#### Soil Rating Lines


 0 - 25  
 25 - 50  
 50 - 100  
 100 - 150  
 150 - 200  
 > 200  
 Not rated or not available

#### Soil Rating Points

 0 - 25  
 25 - 50  
 50 - 100  
 100 - 150  
 150 - 200  
 > 200

 Not rated or not available


### Water Features

 Streams and Canals

### Transportation

 Rails  
 Interstate Highways  
 US Routes  
 Major Roads  
 Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

**Warning:** Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
 Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
 Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bedford County, Virginia  
 Survey Area Data: Version 11, Dec 11, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 8, 2010—Mar 17, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.



## Depth to Any Soil Restrictive Layer

Depth to Any Soil Restrictive Layer— Summary by Map Unit — Bedford County, Virginia (VA019)				
Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
7B	Cecil fine sandy loam, 2 to 7 percent slopes	>200	21.6	22.4%
7C	Cecil fine sandy loam, 7 to 15 percent slopes	>200	36.4	37.7%
21D3	Madison sandy clay loam, 15 to 25 percent slopes, severely eroded	>200	29.1	30.1%
21E3	Madison sandy clay loam, 25 to 40 percent slopes, severely eroded	>200	0.6	0.6%
24C	Mecklenburg loam, 7 to 15 percent slopes	>200	1.7	1.7%
26D	Poindexter fine sandy loam, 15 to 25 percent slopes	56	7.3	7.5%
<b>Totals for Area of Interest</b>			<b>96.7</b>	<b>100.0%</b>

## Description

A "restrictive layer" is a nearly continuous layer that has one or more physical, chemical, or thermal properties that significantly impede the movement of water and air through the soil or that restrict roots or otherwise provide an unfavorable root environment. Examples are bedrock, cemented layers, dense layers, and frozen layers.

This theme presents the depth to any type of restrictive layer that is described for each map unit. If more than one type of restrictive layer is described for an individual soil type, the depth to the shallowest one is presented. If no restrictive layer is described in a map unit, it is represented by the "> 200" depth class.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

## Rating Options

*Units of Measure:* centimeters

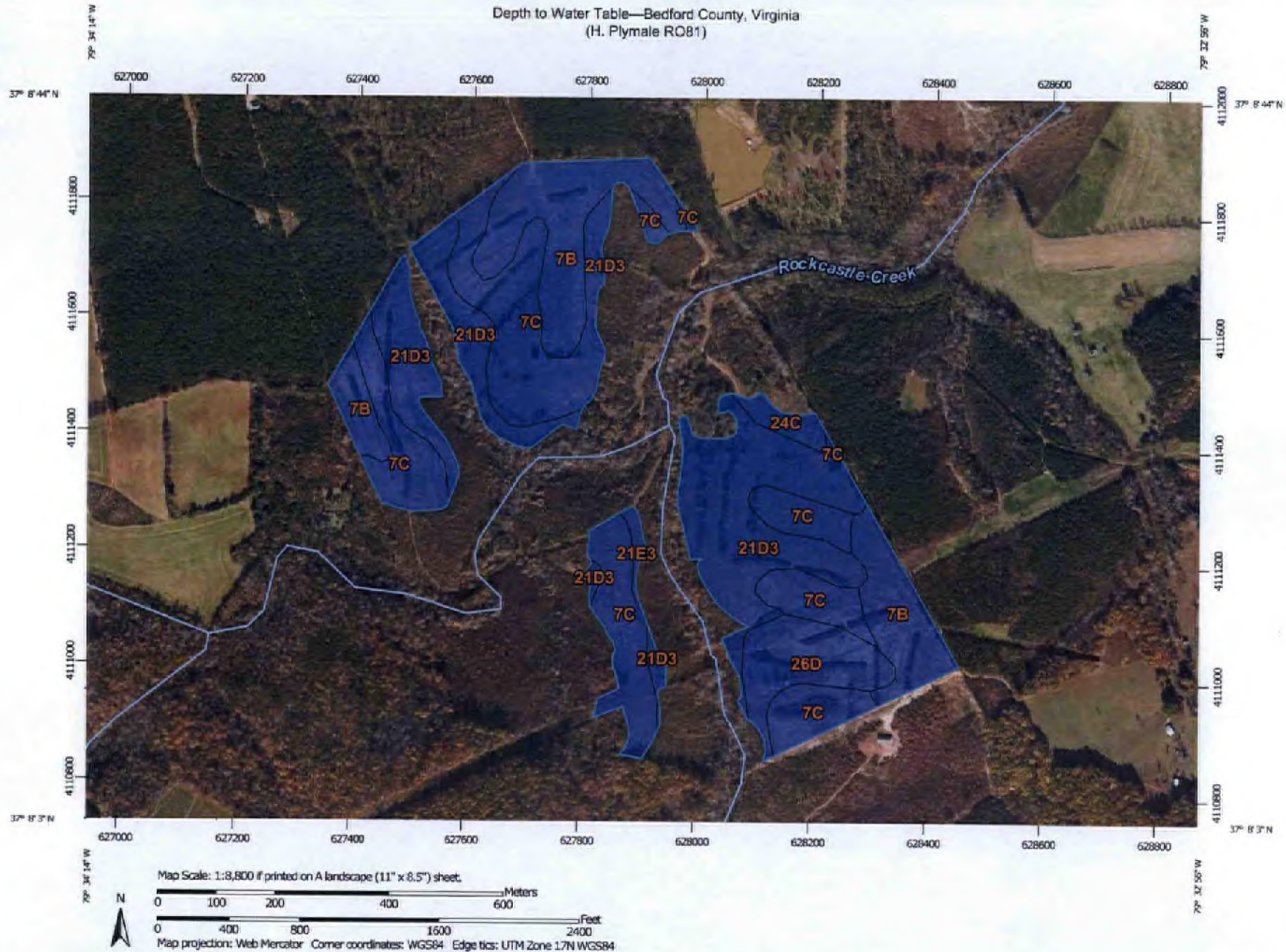
*Aggregation Method:* Dominant Component

*Component Percent Cutoff:* None Specified

*Tie-break Rule:* Lower

*Interpret Nulls as Zero:* No

Depth to Water Table—Bedford County, Virginia  
(H. Plymale RO81)



Natural Resources  
Conservation Service


Web Soil Survey  
National Cooperative Soil Survey

2/25/2016  
Page 1 of 3

Depth to Water Table—Bedford County, Virginia  
(H. Plymale RO81)








## MAP LEGEND

### Area of Interest (AOI)








 Area of Interest (AOI)

### Soils







#### Soil Rating Polygons

-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200
-  Not rated or not available

#### Soil Rating Lines

-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200
-  Not rated or not available

#### Soil Rating Points

-  0 - 25
-  25 - 50
-  50 - 100
-  100 - 150
-  150 - 200
-  > 200

 Not rated or not available

### Water Features

 Streams and Canals

### Transportation

-  Rails
-  Interstate Highways
-  US Routes
-  Major Roads
-  Local Roads

### Background

 Aerial Photography

## MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:24,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service  
Web Soil Survey URL: <http://websoilsurvey.nrcs.usda.gov>  
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Bedford County, Virginia  
Survey Area Data: Version 11, Dec 11, 2013

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Nov 8, 2010—Mar 17, 2011

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

## Depth to Water Table

Depth to Water Table— Summary by Map Unit — Bedford County, Virginia (VA019)				
Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
7B	Cecil fine sandy loam, 2 to 7 percent slopes	>200	21.6	22.4%
7C	Cecil fine sandy loam, 7 to 15 percent slopes	>200	36.4	37.7%
21D3	Madison sandy clay loam, 15 to 25 percent slopes, severely eroded	>200	29.1	30.1%
21E3	Madison sandy clay loam, 25 to 40 percent slopes, severely eroded	>200	0.6	0.6%
24C	Mecklenburg loam, 7 to 15 percent slopes	>200	1.7	1.7%
26D	Poindexter fine sandy loam, 15 to 25 percent slopes	>200	7.3	7.5%
<b>Totals for Area of Interest</b>			<b>96.7</b>	<b>100.0%</b>

## Description

"Water table" refers to a saturated zone in the soil. It occurs during specified months. Estimates of the upper limit are based mainly on observations of the water table at selected sites and on evidence of a saturated zone, namely grayish colors (redoximorphic features) in the soil. A saturated zone that lasts for less than a month is not considered a water table.

This attribute is actually recorded as three separate values in the database. A low value and a high value indicate the range of this attribute for the soil component. A "representative" value indicates the expected value of this attribute for the component. For this soil property, only the representative value is used.

## Rating Options

*Units of Measure:* centimeters

*Aggregation Method:* Dominant Component

*Component Percent Cutoff:* None Specified

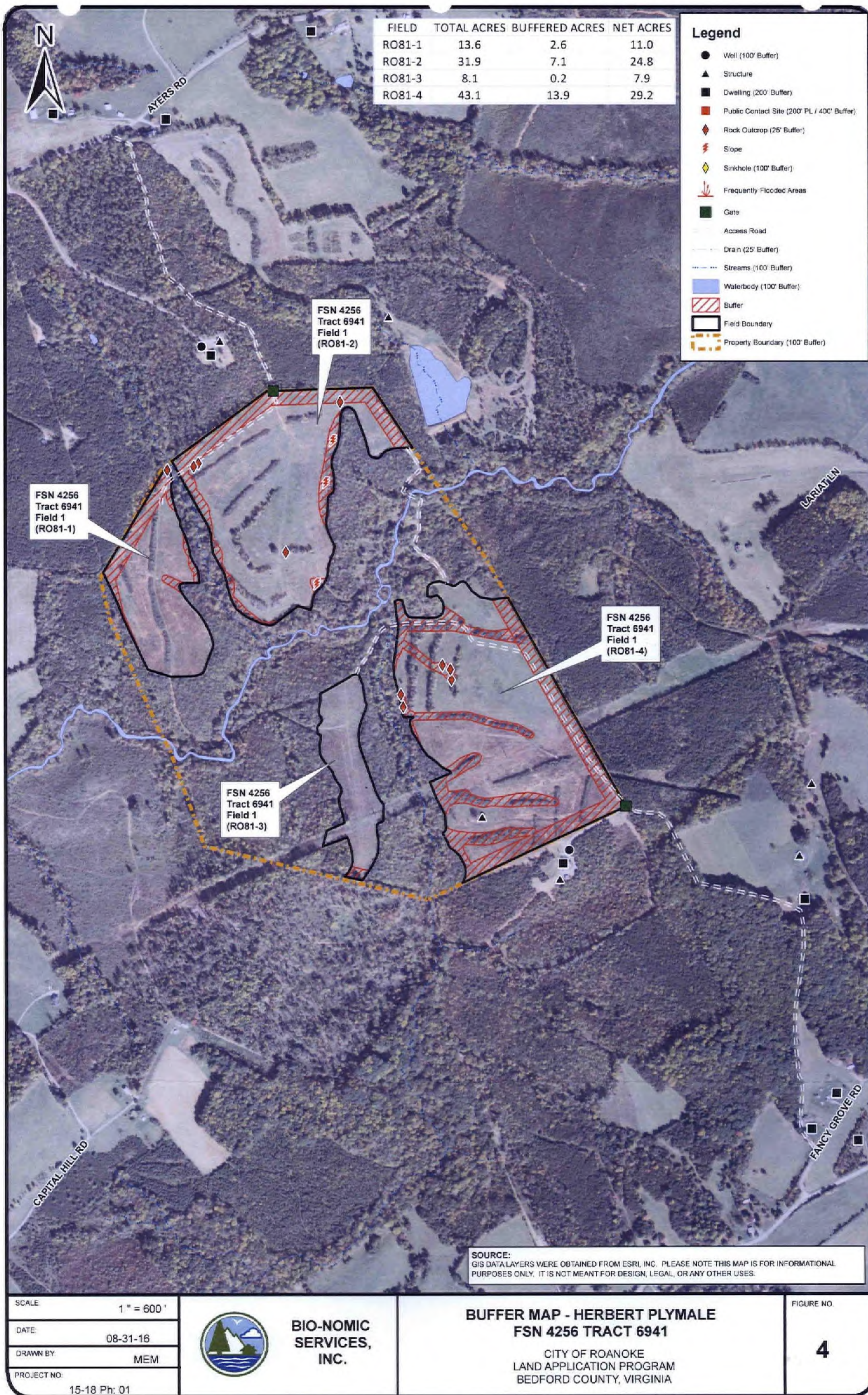
*Tie-break Rule:* Lower

*Interpret Nulls as Zero:* No

*Beginning Month:* January

*Ending Month:* December









1 inch = 400 feet

**Farm: 3128**  
**Tract: 5990**

Wetland Determination Map  
 Wetland  
 Upland  
 Water

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.



**Bedford County, VA**

**Jan 4, 2016**



Hobbs Mullins Ln

1  
41.9 ac  
HEL



1 inch = 244 feet

**Farm: 3130**  
**Tract: 5992**



**Bedford County, VA**

**Wetland Determination Methods**

-  Protected Area
-  Limited Public Access
-  Private Land/Ownership

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.




**Jan 4, 2016**





1 inch = 734 feet

**Farm: 4256**  
**Tract: 6941**

**Wetland Determination Maps**  
 Reduced Use  
 Limited Use  
 No Wetlands

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original determination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.



**Bedford County, VA**

**Jan 4, 2016**





1 inch = 154 feet

**Farm: 4256**  
**Tract: 2998**



**Bedford County, VA**

**Wetland Determination Map**  
 Restricted Use  
 Limited Public Access  
 Forest Land/Conservation/Designated Wetlands

Disclaimer: Wetland identifiers do not represent the size, shape or specific determination of the area. Refer to your original dermination (CPA-026 and attached maps) for exact wetland boundaries and determinations, or contact NRCS.

**Jan 4, 2016**



Report Number: 16-098-0501

Account Number: 45671

Send To: BIO-NOMIC SERVICES INC

Joel Coert

516 ROUNDTREE RD

CHARLOTTE NC 28217



"Every acre...Every year."™

Submitted By: DON GREENE

Farm ID: RO 81

7621 Whitepine Road, Richmond, VA 23237

Main 804-743-9401 • Fax 804-271-6446

www.waypointanalytical.com

Grower: PLYMALE

## SOIL ANALYSIS REPORT

Analytical Method(s): Lime Index Mehlich 3 Loss On Ignition Water pH

Date Received: 04/07/2016

Date Of Analysis: 04/08/2016

Date Of Report: 04/08/2016

Sample ID Field ID	Lab Number	OM	W/V	ENR	Phosphorus			Potassium	Magnesium	Calcium	Sodium	pH		Acidity	C.E.C
		% Rate	Soil Class	lbs/A	M3 ppm Rate	ppm Rate	ppm Rate	K ppm Rate	Mg ppm Rate	Ca ppm Rate	Na ppm Rate	Soil pH	Buffer Index	H meq/100g	meq/100g
81-1	06671	2.5 L	MIN	94	1 VL NC = 1			74 M NC = 38	32 L	398 L		5.0	6.76	1.7	4.1
81-2	06672	2.5 L	MIN	93	1 VL NC = 1			80 M NC = 41	39 L	431 L		4.9	6.72	2.1	4.8
81-3	06673	2.6 M	MIN	96	1 VL NC = 1			59 L NC = 30	29 VL	400 L		4.9	6.74	1.9	4.3
81-4	06674	2.9 M	MIN	102	2 VL NC = 2			70 M NC = 36	35 L	361 L		4.9	6.75	1.8	4.1

Sample ID Field ID	Percent Base Saturation					Nitrate	Sulfur	Zinc	Manganese	Iron	Copper	Boron	Soluble Salts	Chloride	Aluminum
	K %	Mg %	Ca %	Na %	H %	NO <sub>3</sub> N ppm Rate	S ppm Rate	Zn ppm Rate	Mn ppm Rate	Fe ppm Rate	Cu ppm Rate	B ppm Rate	SS ms/cm Rate	Cl ppm Rate	Al ppm
81-1	4.6	6.5	48.5		41.5										
81-2	4.3	6.8	44.9		43.8										
81-3	3.5	5.6	46.5		44.2										
81-4	4.4	7.1	44.0		43.9										

Values on this report represent the plant available nutrients in the soil. Rating after each value: VL (Very Low), L (Low), M (Medium), H (High), VH (Very High). ENR - Estimated Nitrogen Release. C.E.C. - Cation Exchange Capacity.

Explanation of symbols: % (percent), ppm (parts per million), lbs/A (pounds per acre), ms/cm (milli-mhos per centimeter), meq/100g (milli-equivalent per 100 grams). Conversions: ppm x 2 = lbs/A, Soluble Salts ms/cm x 640 = ppm.

This report applies to sample(s) tested. Samples are retained a maximum of thirty days after testing.

Analysis prepared by: Waypoint Analytical Virginia, Inc.

by: *Paucic McGeary*

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